BY ORDER OF THE COMMANDER
AEROSPACE MAINTENANCE &
REGENERATION CENTER

AMARC INSTRUCTION 21-119

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Maintenance

RECEIPT/PROCESSING-IN AEROSPACE VEHICLES AND RELATED STORAGE ASSETS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFMCR 65-9, *Removal of Parts From Aircraft Arriving and in Storage at the Aerospace Maintenance and Regeneration Center.* It establishes responsibility and provides guidance for the processing in of aerospace vehicles, missiles, photo shelters, and communications, electronics and meteorological (CEM) equipment declared excess to the requirement of the owning service. It sets up the responsibilities and procedures for the examination and evaluation (E&E) of aircraft at AMARC. It applies to the Aircraft Management (LA), Logistics (LG), Comptroller (FM) and Plans and Programs (XP) Directorates.

SUMMARY OF CHANGES: Office symbols and responsibilities have been changed to align with the reorganization. Paragraphs were renumbered and realigned for process flow. Attachment 1, Terms, Acronyms, Abbreviations has been added and attachments realigned. Required forms have been included in the attachments with the purpose, explanation of use and filling of the forms. MAOI 65-8, *Aircraft Examination and Evaluation (E&E)* has been incorporated into this instruction.

1. INTRODUCTION. Process-in projects originate from customers, such as Air Force, Army, Navy, or Coast Guard, placing aerospace vehicles in storage. LA receives notification of a project directive from the Workload Division (FMW) through issue of a work authorization document (WAD). All process-in workloads that are negotiated and accepted must be authorized by issuing a WAD and identified by a WAD number before any direct labor hours can be expended, recorded, or charged against project. WADs are an integral part of the process-in and storage of aerospace vehicles or equipment. The WADs furnish data for workload planning and authorize the expenditure of labor and materiel. Information contained on the WAD or project directive will determine what category of storage is required.

2. AIRCRAFT PRESERVATION PROCESS. Aircraft arriving for storage at AMARC will be inducted into storage using one of the following preservation processes: 1000, 2000, 3000, or 4000. (See attachments 2 through 5.)

2.1. In the event deviation is required from the materials used (as specified in technical order (TO) 1-1-686, *Desert Storage Preservation and Process Manual for Aircraft, Aircraft Engines, and Aircraft Auxiliary Power Unit Engines)* in the preservation process or from Depreservation/Represervation Flow Chart [attachment 6]), the following sequence of events will occur:

2.1.1. The Process In Division (LAI), Process In Support Branch (LAIA) Scheduling/Job Control, will notify LA and LAIA, Planner of required deviation.

2.1.2. LAIA will notify the owning service, via telephone, of the required deviation. Points of contact are:

2.1.2.1. Army: HQ AVSCOM, St. Louis, Missouri, DSN 693-2372.

2.1.2.2. Navy: Naval Inventory Control Point (NAVICP), Detachment Field Service Office (FSO), DMAFB, Arizona, DSN 228-2342/8593.

2.1.2.3. Air Force: AMARC/LA, DMAFB, Arizona, DSN 228-8116/8969.

2.1.2.4. Coast Guard: WR-ALC/LB-CG Warner Robins AFB, Georgia, DSN 468-2018.

2.1.3. The owning service will give a verbal approval or disapproval and will confirm in message form addressed to AMARC/LAI. **NOTE**: For Air Force aircraft, LAI will prepare written documentation, which will be attached to the process-in work control package (AFMC Form 958, **Work Control Document**).

2.2. If a permanent change to the sequence of the preservation flow is proposed, each service must coordinate and concur with the proposed change.

2.3. Modifications or changes to the sequence of the flow or preservation requirements may occur if an aircraft is to be placed in a modified storage category. If possible, negotiations with the owning service will be made prior to arrival of the aircraft at AMARC.

3. AEROSPACE VEHICLE AND DISTRIBUTION OFFICER (AVDO) FUNCTION. The FMW, AVDO compiles a forecast of all incoming aerospace vehicles for storage processing on a weekly basis. The AVDO will distribute the forecast to the appropriate organizations. **NOTE**: LAIA, Planner will order the applicable TO.

4. AEROSPACE VEHICLE ARRIVAL PROCEDURES. (**NOTE:** When notified by FSO that arriving Navy aircraft are coming direct from an aircraft carrier, the aircraft will be washed or fresh-water rinsed within 10 days of arrival.) Some actions will vary depending on the preservation process.

4.1. The AVDO will issue the Master AMARC Form 71, **Work Order Request** to LAIA, Scheduler.

4.2. If an aircraft is scheduled to arrive during off-duty hours, the following will be accomplished:

4.2.1. The LAI supervisor will:

4.2.1.1. Approve required overtime.

4.2.1.2. Coordinate the availability of Receiving Branch (LAIR), Specialist Support Division (LAS) Egress/Armament Branch (LASG), and Equipment Services Division (LAE) Towing

Branch (LAET) personnel.

4.2.2. LAIR, LASG, Pneudraulic Branch (LASN), and LAET personnel will follow procedures outlined in paragraphs below.

4.3. When an aerospace vehicle arrives, LAIA, Scheduling/Job Control will notify LAIR, LASG, and LASN. When scheduled, the following steps will occur:

4.4. LAIR personnel will:

4.4.1. Direct the aircraft to the AMARC receiving area.

4.4.2. Park and secure the aircraft.

4.4.3. Install ground safety locks and safety pins.

4.4.4. Prior to accepting the aircraft, ask the aircraft commander to enter all discrepancies on one of the following:

4.4.4.1. AFTO Form 781A, **Maintenance Discrepancy and Work Document**.

4.4.4.2. OPNAV Form 3760-2, **Naval Aircraft Flight Record and Report**.

4.4.4.3. OPNAV Form 4790/60, **VIDS/MAFS**.

4.4.4.4. DA Form 2408-13, **Aircraft Inspection and Maintenance**.

4.4.5. For Army arrivals, when the flight crew provides an aircraft transfer document, reproduce the signed document and send the copy to USAAVSCOM AMSAV-SPWR, St. Louis, Missouri.

4.4.6. Reproduce a copy of open discrepancies listed on these forms and place in the AFMC Form 958 workbook.

4.4.7. Help download the crew and their personal effects and ask the aircraft commander to remove the pyro pistol for turn in. Provide transportation for the crew from the aircraft to LAIR (bldg. 7506). Prepare a hand receipt in 4-parts, (attachment 7) for the pyro pistol.

4.4.8. Make an aircraft jacket folder to be kept in LAIR for represervation instead of going to the aircraft records.

4.4.9. Take engine oil and total acid number (TAN) samples, using AMARC Form 40, **Engine/ CSD Oil Analysis**, (attachment 8) immediately after engine shut down. (Also see AMARCI 21-120, *Oil Analysis Program*.)

4.4.10. Attach battens to all applicable aircraft.

4.4.11. Notify LAIA, Scheduler of completion.

4.5. Prior to towing the aircraft, LASG personnel will verify the installation of flight status ejection seat safety pins and install, if not already done.

4.6. LASN personnel will take a hydraulic sample of flight control systems within 1 hour of engine shut down. Process sample forms IAW LAOI 21-3, *Hydraulic Fluid Sampling.* **NOTE**: The Navy does not require jacking and cycling the landing gear prior to taking hydraulic oil samples.

4.7. LAIA will notify LAET to tow aircraft to parking ramp. When the aircraft is ready to be towed or within 2 hours of aircraft arrival, complete an AF Form 1991, **General Purpose Creation**, in

accordance with (IAW) AMARCR 21-131, *AMARC Aerospace Vehicle Inventory Control/Status System*, and call the information in to the FMW, Aircraft Status to load aircraft status.

4.8. After LASG IAW paragraph 4.5 has verified the seat pins, LAIR will:

4.8.1. Remove aircraft clocks on the day of arrival. Tag and identify the clocks by type and serial number/bureau number (BUNO) of aircraft from which removed. Prepare an AMARC Form 22, **Components/Items Missing and/or Removed from Aircraft** (attachment 9 and paragraph 11).

4.8.2. Perform the preliminary aircraft pilferable item check using AMARC Form 16, **Preliminary Aircraft Pilferable Item Check** (attachment 10). Conduct a joint inspection of the aircraft with the aid of a crewmember. Annotate the form to account for all items listed.

4.8.3. When the crewmember requests that parachutes, seat packs, or travel pods be removed from the aircraft for shipment, call LAIA for a taxi to take the pilot to Supply Division (LGS) Center Support Management Branch (LGSS) to request a "Do Not Post" shipping document. (See paragraph 12.) NOTE: Crew members or responsible individuals are required to identify and provide a listing of any hazardous materiels (HAZ MAT) assets contained in personal equipment i.e., parachutes or any other assets which might contain HAZ MAT. This list will be turned over to LGSS/LGLP prior to preparation of shipping document.

4.8.4. When processing a very important person (VIP) and special configuration type aircraft:

4.8.4.1. Make a special written inventory report of all nonstandard and pilferable equipment aboard the aircraft.

4.8.4.2. When no one is working on the aircraft, keep it locked and secured. LAIR and LAIA, Job Control will keep the keys during in processing and will sign them out by hand receipt.

4.8.4.3. Place a card on the main door of aircraft indicating the location and disposition of the keys during each work phase.

4.8.5. For Army and Navy aircraft, fill out one copy of AMARC Form 49, **Army/Navy Aerospace Vehicle Delivery** receipt (attachment 11).

4.8.6. Send the original AFTO Form 290, **Aerospace Vehicle Delivery,** or AMARC Form 49 to Aircraft Records (XPIIM) for filing in the aircraft records.

4.8.7. Fill out an AMARC Form 125, **Aircraft Daily Journal** (attachment 12), showing the actual date of arrival. Immediately send a copy to XPIIM.

4.8.8. If the aircraft has fuel on board, place a red patch on the left side of the aircraft nose.

4.8.9. Stencil the AMARC identification (ID) number on both sides of the nose and tail of the aircraft.

4.8.10. Annotate the AFMC Forms 958 and leave the forms on the aircraft for further processing.

4.8.11. For helicopters:

4.8.11.1. Install in-flight blade inspection system (IBIS) indicator covers, as directed.

4.8.11.2. Purge and service rotor blades.

4.8.11.3. Remove IBIS indicators and turn in to Logistics Support Division (LGL) Special Assets Branch (LGLM). Process radioactive IBIS IAW AMARC Safety Office (XP-SE)

directions.

4.8.12. When all aircraft arrival procedures are completed, notify LAIA Scheduling/Job Control that the aircraft is ready to be towed.

4.8.13. Forward the aircraft records to XPIIM.

4.8.14. Notify LAIA, Scheduler of completion.

5. AMARC INDUCTION TREATMENT. LAIA will prepare the scheduling AMARC Form 71, **Work Order Request**.

5.1. For aircraft in flyable storage status:

5.1.1. FMW will issue a WAD to include additional man-hours and change aircraft status as appropriate.

5.1.2. LAI or the Process Out Division (LAO) Process Out Support Branch (LAOA), Scheduling/ Job Control will prepare an AMARC Form 71 in three copies for engine runs or motor over and comply with daily inspections IAW AFMC Form 958. **NOTE**: Route any requests for aircraft sequence deviation through LA for coordination with the applicable service and annotate approved deviations on the AFMC Form 958 IAW paragraph 2.1.

5.1.3. LAIP or Aircraft Maintenance A or B Branch (LAOB/LAOD) mechanics will:

5.1.3.1. Comply with engine runs or motor over.

5.1.3.2. Annotate the AFMC Form 958 and the AMARC Form 71.

5.1.3.3. Notify LAIA or LAOA, Scheduling/Job Control of completion. **NOTE**: A 45-day extension may be requested after the original 45-day hold period expires.

5.2. LASG personnel will perform a safety inspection of the aircraft as follows:

5.2.1. Remove munitions ordinance and process as follows:

5.2.1.1. Inspect and remove all flares, loose explosives and ammunition that may be in the aircraft.

5.2.1.2. “Maintenance Safety” the egress system.

5.2.1.3. Remove weapons. If approved by the LAS chief, overtime will be used to make sure easily removable weapons do not stay on the aircraft after normal duty hours.

5.2.1.4. Prepare an AMARC Form 22 showing nomenclature, type or part number and quantity of items removed, and type and serial number of aircraft from which removed (see attachment 9).

5.2.1.5. When items are ready for turn in, coordinate turn-in with LGLM to process munitions IAW Combat Ammunitions System Base (CAS-B).

5.2.1.6. Accomplish internal gun control IAW AMARCI 31-101, *Safeguarding Firearms and Munitions.*

5.2.1.7. Stencil the aircraft as follows: “EGRESS SAFE, GUNS AND PYLONS CLEAR,

DATE MECHANIC ”

NOTE:

Maintenance/inspections may be performed on some aircraft only if entry into cockpit is not required. If entry is necessary, only certified egress-familiarization trained personnel will be allowed in this area.

5.2.1.8. Remove cartridge-actuated device/propellant-actuated device (CAD/PAD) IAW the AFMC Form 958.

5.2.1.9. Paint a green cross on the front, left side of the aircraft to indicate all explosives have been removed or stencil the aircraft IAW the AFMC Form 958.

5.2.1.10. Process all CAD/PAD items. For each item, prepare material condition tag for inspection activity FV2373 with the following information:

Table 1. Condition Tag Entries.

Block	Entry
2	Aircraft serial number
6	Type aircraft
7	Resource control center (RCC)
8	Quantity
10	Federal supply classification (FSC)
11	Nomenclature and type or part number
12	Serial number (if no serial number is available, enter “NONE”)
13	Lot number and date of manufacture
14	Installed date (if unknown, enter date of manufacture), removal date, and signature
23	National stock number (NSN)
24	Department of Defense Identification Code (DoDIC), if applicable
25	Production control number (PCN)

5.2.2. Process Navy parachutes, survival kits, life rafts and equipment IAW FSO Processing and Storage Requirements for Aircraft Equipment Letter, dated 10 April 1995.

5.2.3. Remove and process parachutes, survival kits, and containers which are part of the ejection seat as follows:

5.2.3.1. Take them to the shop for breakdown, condition inspection, and disposition.

5.2.3.2. Identify all components, attaching the applicable materiel condition tags IAW AMA-RCI 23-202, *Tagging and Labeling Materiel.*

5.2.3.3. For survival containers, annotate the reverse side of the materiel condition tag to show status of components as follows:

Table 2. Condition Tag Reverse.

FIRST AID KIT REMOVED.

DANGEROUS OR HAZARDOUS MAT REMOVED.

CYLINDER; REMOVED - EMPTY - DISCONNECTED.

5.2.3.4. Turn in to LGLM.

5.2.4. Process first aid kits removed from survival kits as follows:

5.2.4.1. Identify on hand receipts (4 part (attachment 7)).

5.2.4.2. Secure in Egress/Armament Branch (LASG).

5.2.4.3. Turn in kits once a month on a DD Form 1348-1, **Issue Release/Receipt Document**, to the 355th Medical Support Squadron, Medical Logistics Flight (355 MDSS/SGSL). The medical supply personnel will sign and date the DD Form 1348-1 as a receipt; a copy will be kept in LAS files for 1 year. First-aid kits from Navy aircraft will be processed per FSO instructions.

5.2.5. Comply with remaining work requirements on the AFMC Form 958. Notify LAIA, Scheduler on completion.

5.3. LAIR will:

5.3.1. Prepare AMARC Form 43, **Aircraft Examination and Evaluation Data** (attachment 13), and enter historical data.

5.3.2. Prepare AMARC Form 13, **Aircraft Inventory Control Card**, as required (attachment 14).

5.3.3. Check aircraft records and list any missing documents on the AFTO Form 290 receipt. (When an Air Force aircraft arrives without an AFTO Form 290, prepare the form in two copies.) The aircraft commander or an authorized representative will sign the form. LAIR will sign the form acknowledging receipt of property and aircraft records.

5.3.4. Remove all survival containers or life rafts that are not part of the ejection seat from the aircraft and document on AMARC Form 22. If the crewmembers request the survival container or life rafts be removed from the aircraft, comply with paragraph 12. **NOTE**: Navy survival containers and life rafts will be left on board.

5.3.5. Remove parachutes that are not part of the ejection seat and for which there is no request for shipment. Remove first aid kits from the aircraft and document on AMARC Form 13. Include aircraft serial number, MDS, and number of kits removed. Store first aid kits pending turn-in LAIR area (reference paragraph 5.2.4). Deliver life rafts and parachutes to LASG.

5.3.6. Purge the oxygen system.

5.3.7. Perform the classified and accountable inventory (see paragraph 6).

5.3.8. Review, sign, and date the AFMC Form 958 once induction has been completed.

5.3.9. Notify LAIA, Scheduler of completion.

5.4. When aircraft is ready, LAIA will schedule LAET to tow to the washrack.

5.5. For Air Force Aircraft and Navy aircraft in 2000 Preservation, an E&E will be accomplished IAW

paragraph 7.

5.6. Corrosion Control Branch (LASC) personnel will:

5.6.1. Pre-lube, wash, and post-lube aircraft IAW applicable AFMC Form 958. **NOTE:** Navy aircraft only, return to LASC for additional wash and relube points if needed.

5.6.2. Upon completion, notify LAIA that aircraft is ready to tow.

5.7. When aircraft is ready to be towed to the assigned area, LAIA will schedule LAET.

5.8. Perform the E&E inspection IAW paragraph 7 if it has not already been accomplished.

5.9. LAIP will:

5.9.1. Perform the final engine and airframe preservation IAW AFMC Form 958 as follows:

5.9.1.1. Jet:

5.9.1.1.1. Defuel aircraft.

5.9.1.1.2. After aircraft is defueled, remove red patch from left side of aircraft nose.

5.9.1.1.3. Preserve fuel system.

5.9.1.1.4. Preserve other systems.

5.9.1.1.5. Remove aircraft batteries and send to the Electric/Instrument Branch (LASA), Battery Shop for processing and turn-in to LGLM.

5.9.1.2. Reciprocating:

5.9.1.2.1. Prepare engines, set up (engine run), and preserve.

5.9.1.2.2. Preserve fuel system.

5.9.1.2.3. Preserve all other systems.

5.9.1.2.4. Remove aircraft batteries and send to the LASA, Battery Shop, for processing and turn-in to LGLM.

5.9.2. Helicopters. Remove and process main and tail rotor blades IAW WAD instructions outlined in AFMC Form 958. If applicable, tail rotor blades may be stored in the aircraft.

5.9.3. Following preservation, the production certifier will review, sign, and date the AFMC Form 958 to show completion of all work and complete the AMARC Form 71.

5.9.4. Notify LAIA of completion of engine, fuel, hydraulic system preservation, and that the aircraft is ready to tow.

5.10. After the engine and fuel system preservation is complete and aircraft is towed to a hold area, LASG personnel will:

5.10.1. Remove explosives from the engine fire extinguisher.

5.10.2. Ensure the production certifier signs and dates the AFMC Form 958 to show deactivation of the fire extinguisher.

5.10.3. Notify LAIA of completion.

5.11. For Navy aircraft, LASC will:

5.11.1. Lube and rewash the aircraft as required by TO 1-1-686.

5.11.2. Remove and treat corrosion as identified by E&E and outlined on the AFMC Form 958.

5.11.3. Record on the AFMC Form 958 any corrosion overlooked by E&E personnel. If sufficient hours have been allocated, treat corrosion; otherwise, refer to para. 5.11.5.

5.11.4. If additional man-hours are greater than the authorized standard to arrest the corrosion, request over and above hours through LAIA. If additional man-hours are not authorized note the corrosion was not treated on the AFMC Form 958. (Both only apply with owning service approval.)

5.11.5. Review, sign, and date the AFMC Form 958 to indicate all work is done and aircraft is ready for the next phase.

5.11.6. Complete the AMARC Form 71, if required, and notify LAIA of completion.

5.12. LAIA, Job Control will notify LAET that aircraft is ready to tow.

5.13. When scheduled by LAIA, LASN will:

5.13.1. Lubricate wheel bearings IAW applicable technical data.

5.13.2. Take fluid samples of aircraft struts and flush if necessary. Fill with fluid.

5.13.3. Flush hydraulic system, if needed, and proceed IAW LAOI 21-3, *Hydraulic Fluid Sampling*.

5.13.4. Repair hydraulics system as required.

5.14. When scheduled by LAIA, the Storage Services Branch (LAIS) will:

5.14.1. Perform the sealing and spraylat application as specified in the AFMC Form 958 and the applicable sealing diagrams. Refer to AMARCI 21-123, *Sealing and Resealing of Stored Aircraft*.

5.14.2. Notify LAIA, Scheduler when completed.

5.15. LAIA, Scheduler will notify LAET when aircraft is ready to be towed to the desert.

5.16. LAET will:

5.16.1. When each processing-in phase is completed, relocate the aircraft IAW directions by LAIA Scheduler, preplanning instructions or AMARC Form 31**, Maintenance Planning and Control Schedule. NOTE**: Flyable Hold category aircraft will not be moved from the hard surface unless otherwise directed.

5.16.2. Comply with the items specified in the authorized aircraft towing checklist and IAW TO 1-1-686 before and during movement and while mooring of the aircraft. Secure IAW TO 1-1-686.

5.16.3. When the aircraft is towed to a new parking location:

5.16.3.1. Annotate on the AMARC Form 71 with the area, row, spot or work site location of

the aircraft.

5.16.3.2. Remove the AFMC Form 958 from the aircraft (if spraylat has been completed), stamp and date the towing portion and turn in the workbook to LAET supervisor, who logs the movement and sends the workbook to XPIIM not later than 3 days from time of receipt.

5.16.4. Secure aircraft placed in temporary storage areas on AM2 matting or hold areas with "D" ring or augers and grounded.

5.16.5. Report movement to FMW, Aircraft Status IAW AMARCI 21-131.

5.16.6. For desert storage:

5.16.6.1. Park aircraft on AM2 or suitable matting.

5.16.6.2. Deflate shock struts one to three inches.

5.16.6.3. Secure chocks by nailing on slats.

5.16.6.4. Tie all aircraft down with º inch cables. The point of attachment will be at the tie down part of the aircraft. Cables will not be allowed to contact polished surfaces of the strut cylinders. Fasten the ground end of the cables to the auger stakes. Secure cables using approved clamps and clamp patterns. **NOTE**: Desert tie down configurations will be determined by using current applicable technical data, customers' requests and local instructions. All Navy aircraft desert tie down configurations will be coordinated with the FSO prior to establishing and implementing any new tie down patterns.

5.16.7. Notify LAIA, Scheduler of rescheduled and completed work orders.

5.17. When the completed AFMC Form 958 is received, LAIA, Scheduler will:

5.17.1. Pull the suspense master AMARC Form 71 for each aircraft completed.

5.17.2. Attach the AF Form 1991 to the master AMARC Form 71 to show that all classified equipment is removed.

5.17.3. Have the LAIR supervisor sign the master AMARC Form 71 and send to the AVDO for closure action.

5.17.4. Send the AFMC Form 958 to XPIIM for file.

6. CLASSIFIED AND ACCOUNTABLE INVENTORY. This inventory consists of two functions: Classified item inventory and the all-accountable equipment inventory (including pilferable and shelf life). LAIA, Planner may identify additional items to be removed from –21 TOs for Air Force and applicable technical data for other services. Classified items are indicated on the AF Form 958 in the workbook.

6.1. Classified Item Inventory.

6.1.1. Upon scheduling by LAIA, LAIR personnel will remove, identify, condition inspect, and appropriately tag all classified equipment IAW AMARCI 23-202, and AMARCI 31-401, *Removal, Control, Issuance of Classified Materiel,* and turn in classified items to Storage and Distribution Branch (LGSD) as follows:

6.1.1.1. Prepare an AMARC Form 22 (attachment 12) in two copies and a hand receipt (attachment 7) in four copies:

6.1.1.1.1. If the classified item inventory reflects no classified on board the aircraft, do not prepare an AMARC Form 22.

6.1.1.1.2. If classified items are to remain on board the aircraft, prepare and process a waiver letter IAW AMARCI 31-401.

6.1.1.2. Forward the AMARC Form 22 and hand receipt with the property to LGSD.

6.1.2. LGSD will:

6.1.2.1. Receipt for the property on copy 2 of the AMARC Form 22 (LAIR retains copy 2 in a 20 day suspense file.)

6.1.2.2. Update the asset visibility record IAW paragraph 11.

6.1.2.3. After update of the asset visibility record, return copy 1 of the AMARC Form 22 and copy 2 of the *RE to LAIR.

6.1.3. LAIR will:

6.1.3.1. Process AMARC Form 22 IAW paragraph 11.

6.1.3.2. When all classified items have been removed from an aircraft, prepare an AF Form 1991 in two copies IAW AMARCI 21-131, chapter 3. One copy will be sent to the AVDO through the LAIA, Scheduler. After input by the AVDO, the form will be sent to XPIIM. Copy two is retained to verify information on the Aircraft Status Directory, Part II.

6.2. All accountable equipment inventory:

6.2.1. Upon scheduling by LAIA, LAIR will:

6.2.1.1. Inventory all accountable equipment IAW AFI 21-103, *Equipment Inventory, Status and Utilization Reporting,* for Air Force aircraft, OPNAV Instruction 4790.2, *Naval Aviation Maintenance Program,* for Navy aircraft, and applicable technical manuals for Army aircraft. In addition to the directives above, use the aircraft inventory records (AF Form 2692, **Aircraft/Missile Equipment Transfer/Shipping List**, for Air Force aircraft and the applicable -21 TO. Use OPNAV4790/111, *Aircraft Inventory Record,* for Aircraft).

6.2.1.2. Remove, identify, condition inspect (within capability), and tag all accountable equipment IAW AMARCI 23-202. (Any questionable items will be thoroughly researched by LARS, Research.) Examples of other items that will be removed are:

6.2.1.2.1. Shelf life items: Masks (oxygen, smoke, and fire fighter types), survival kits and containers, parachutes (other than ejection seats), life rafts and preservers.

6.2.1.2.2. Pilferable items: Clocks, thermoses, hot pots, and other items as determined by LAIR supervisor.

6.2.1.2.3. Maintenance safety protective equipment, -21 equipment installation items, such as pins, covers and plugs, wing locks, safety struts, main landing gear locks, canopy locks, etc., will be left on the aircraft, where applicable, after being identified and accounted for.

6.2.1.3. Fire Extinguishers:

6.2.1.3.1. Non-Explosive. Deactivate fire extinguishers after completion of engine and

fuel system preservation.

6.2.1.3.2. Explosive Type. LASG will deactivate when scheduled by LAIA.

6.2.2. The inventory team will:

6.2.2.1. Prepare an AMARC Form 13 (attachment 14).

6.2.2.2. Annotate the AMARC Form 13 to reflect the equipment removed from the aircraft.

6.2.2.3. Forward the AMARC Form 13 and the tagged property to the LAIR equipment examiner.

6.2.3. The LAIR equipment examiner will prepare two copies of AMARC Form 22 IAW paragraph 11 and forward the property and forms to LGLM.

6.2.4. LGLM will update the asset visibility record IAW paragraph 11.

6.2.5. LAIR personnel will:

6.2.5.1. Determine if aircraft is missing any items. If shortages are identified:

6.2.5.1.1. Prepare the appropriate aircraft owner notification indicating the shortages:

6.2.5.1.1.1. Message notification for Navy or Coast Guard aircraft.

6.2.5.1.1.2. Letter format for Air Force and Army aircraft (attachment 15).

6.2.5.1.2. Send the shortage notification to the losing organization with suspense of 30 days. If reply is not received within the 30 days, request assistance from the next higher level of command within the losing organization.

6.2.5.1.3. Keep shortage notification and replies as a part of the official aircraft records.

6.2.5.1.4. Process aircraft visibility IAW paragraph 11.

6.2.5.2. Process property found "not accountable to an aircraft" as follows:

6.2.5.2.1. IAW AMARCI 23-202, tag with condition, stock numbers, etc., and turn in new and unused property and reparable investment items to LGSD. LGSD will process into Standard Base Supply System (SBSS) IAW AFI 23-110, *USAF Standard Base Supply Manual*.

6.2.5.2.2. Process scrap found directly to the Defense Reutilization and Marketing Office (DRMO) IAW AFMAN 23-110, Vol. II, Part 13, Chap 1/, AMARC Supplement 1 , *Standard Base Supply Customer's Procedures* . **NOTE**: For Navy aircraft property found and not accountable to aircraft, notify FSO prior to taking any disposal action.

6.2.5.3. When the aircraft inventory is complete:

6.2.5.3.1. Paint the number "7" in yellow, on the left side of the fuselage to show the inspection is complete.

6.2.5.3.2. Complete AMARC Form 71 and return one copy to the LAIR work leader.

6.2.5.3.3. Notify LAIA of completion.

7. EXAMINATION AND EVALUATION (E&E). E&Es are accomplished to document the material condition of aircraft and to provide information to correct condition deficiencies while processing for

storage, withdrawal, and other projects. A thorough, well-documented aircraft E&E gives information that is vital to AMARC maintenance managers and customers. E&E information is frequently decisive in selecting aircraft for mobility, withdrawal, continued storage, or disposal. All E&E inspections for Navy aircraft will use the team concept. This will consist of people from the LAI, LAO, LASA, LASC, Propulsion Branch (LASE), LASG, Structural Repair Branch (LASM) and LASN assigned to perform an in-depth E&E inspection.

7.1. The following are situations where E&E of an aircraft is appropriate:

7.1.1. Pre-induction processing of aircraft being placed in storage.

7.1.2. Certain changes in the storage category of an aircraft.

7.1.3. Aircraft represervation and mobility upgrade.

7.1.4. Customer request. Request for an E&E will be implemented as agreed on a case by case basis. When a customer's request requires deviation from TO 1-1-686 procedures, the customer will be asked to provide a written waiver.

7.1.5. Screening or production planning for aircraft being considered for withdrawal or special projects.

7.2. Types of E&E. (Radiological material will be handled IAW AMARCI 40-201, *Radioisotope Radiation Safety Program*).

7.2.1. In-depth E&E. An in-depth E&E is a thorough inspection to determine the overall aircraft condition and to identify missing parts. Qualified technicians and specialists from LAI, LAO, LASA, LASC, LASE, LASG, LASM, and LASN perform the E&E. The inspection includes removal of all easy-access panels and those screw-held panels requiring removal to adequately determine the condition of the area. The in-depth E&E provides the best possible analysis of the condition of the aircraft without resorting to detailed inspection methods such as x-ray, nondestructive inspection (NDI), etc.

7.2.2. Routine E&E. This term is used to show E&E primarily done to comply with TO 1-1-686 for initial processing of Air Force and Army aircraft. Routine E&E is done within a few days of aircraft arrival to document the initial material condition of the aircraft and missing components. Material condition discrepancies are corrected if they can be done economically and it will prevent significant deterioration of a serviceable or repairable component during storage. Standardized AFMC Form 958/959 for major aircraft categories will be developed from TO 1-1-686 requirements and provided E&E personnel as checklists for routine E&E.

7.2.3. Special E&E. This term is used to denote E&E for inspection requirements beyond those specified in initial processing IAW TO 1-1-686. In some cases, TO 1-1-686 requirements may not be applicable. Special E&E includes missing parts inspections, inspections to determine the condition of specific components, or other requirements more specific than routine E&E. The special E&E workbook will be tailored to produce appropriate management information for a given situation. The following guidelines will be used in developing workbooks for typical situations that occur and an E&E is appropriate.

7.2.3.1. Aircraft Withdrawal (Flyaway). A material condition inspection must be made before work induction. Special emphasis will be placed on the integrity of structures and systems essential for one-time flight to a repair facility. A thorough review of asset visibility

records, such as the D003AC03, Aircraft Component Status Listing, and a physical inventory to identify missing parts are required.

7.2.3.2. Aircraft Withdrawal (Overland). A material condition inspection must be made before disassembly of the aircraft for crating. A physical missing parts inventory may or may not be needed, depending on the conditions agreed to by the purchaser or receiver of the aircraft. Parts replacement or repair will be limited to contractual or otherwise agreed specifications.

7.2.3.3. Aircraft Represervation. A thorough material condition inspection and missing parts inventory will be made for preplanning, before scheduling aircraft for depreservation/represervation IAW TO 1-1-686.

7.2.3.3.1. If the results of the inspections show an aircraft cannot be represerved, based on the absence of essential components, or if material condition defects preclude safe and effective represervation, the aircraft system manager or customer will be contacted to get appropriate status changes or disposition instructions.

7.2.3.3.2. If the aircraft is to be represerved, an additional material condition inspection by E&E personnel will normally not be required. If, at any stage during the depreservation/ preservation cycle, a defect is found that precludes safe and effective represervation, a supplementary E&E sheet will be prepared, stating the reason why represervation cannot be completed. Any decisions regarding status changes will be referred to the system manager or customer.

7.3. Procedures for Developing E&E Requirements:

7.3.1. The E&E type needed will be determined by the activity that requests the E&E. An E&E is needed for initial processing into types 1000, 2000, and 3000 storage IAW TO 1-1-686; however, in many situations, the need for an E&E is uncertain. When an E&E is considered to be a requirement, questions may arise as to whether the routine E&E requirements are appropriate or if special requirements need to be developed. The following guidelines determine minimum or optional E&E requirements in typical situations:

7.3.1.1. Initial Processing:

7.3.1.1.1. 1000 - Routine (Minimum). Exception: An in-depth E&E will be done for Navy aircraft unless directed otherwise.

7.3.1.1.2. 1500 - Routine (Minimum).

7.3.1.1.3. 2000 - Routine (Minimum).

7.3.1.1.4. 3000 - Routine (Minimum) - Flyable Hold. Exception: Navy requires an in-depth.

7.3.1.1.5. 4000 - Not required.

7.3.1.2. Category Change (Navy aircraft requirement is the same applies as 7.3.1.1).

7.3.1.2.1. 2000 or 3000 to 1000 – Routine (Minimum).

7.3.1.2.2. 4000 to 1000 - Routine (Minimum).

7.3.1.2.3. 1000 to 3000 or 2000 - Not required.

7.3.1.2.4. 4000 to 2000 - Routine (Minimum).

7.3.1.2.5. 1000 or 2000 to 3000 - Special (Optional).

7.3.1.2.6. 4000 to 3000 - Special (must include requirements of a routine inspection IAW TO 1-1-686 (Optional)).

7.3.1.3. Customer Request. Special (Optional).

7.3.1.4. Production Preplanning. Normal or Special (Optional).

7.4. Aircraft E&E Inspection. The proper conduct of an E&E requires a considerable degree of sound judgment by the inspector. Although general guidelines are provided, a qualified inspector can best judge the depth of inspection needed to determine the condition of each aircraft and to direct the correction of deficiencies. During the actual E&E, the inspector is not limited to examining areas of easy access. The emphasis of the E&E is on documenting material condition discrepancies which adversely affect the intended functioning of aircraft structures, systems, and components. The location, character, and severity of each discrepancy will be recorded to aid in the discrepancy's correction or, if correction is not necessary, to provide basic information for future actions, such as selection of aircraft for withdrawal, reclamation, or disposal.

7.4.1. Pre-E&E. Review appropriate aircraft historical forms and records for information that might help determine the present condition of aircraft structures and systems. This review should include information from crew outbriefings; operational check data; and airframe, engine and historical data on other systems. Record the results of review on the AFMC Form 958/959.

7.4.2. Performing E&E.

7.4.2.1. At the start of the inspection, review the aircraft and engine history data in the E&E report. Aircraft that have exceptionally high airframe or engine hours could be subject to corrosion damage in cockpits, engine intake, and exhaust trail areas, bilges, landing gear, wheel wells, compartments, and other corrosion prone areas.

7.4.2.2. Make a preliminary walk-around inspection to determine overall cleanliness and condition of external painted surfaces, decals, tires, etc. Make an appropriate notation with location, character, and severity of discrepancies and corrections, as required, in the AFMC Form 958/959.

7.4.2.3. Open all quick access panels on the exterior of the fuselage. Inspect the contents of each compartment for material deficiencies, such as corroded electrical connectors, broken control cable strands, damaged hydraulic fittings, etc. Complete AMARC Form 43 IAW attachment 13. Give special attention to battery compartments where terminal connectors, clamps, other hardware, and structural components could be corroded.

7.4.2.4. Inspect the upper and lower surfaces of wings and stabilizers. Open quick access panels to see if there is any condition defect in electrical, hydraulic, pneumatic, and fuel lines; connectors and cables; and actuators and linkages. Inspect movable surfaces and hinges.

7.4.2.5. Inspect cockpit areas for corrosion and other defects in seats, guide rails, floor panels, and around switches and fasteners; electrical connectors for evidence of corrosion and corrosion products; instrument panel for condition of instrument faces and glass; and canopy frames, seals, and transparent materials for signs of deterioration Does this read okay to you?.

7.4.2.6. Inspect cargo and passenger areas, including seats, galleys, and latrines. Open quick access floor panels and examine floor structure, cables and lines for evidence of corrosion and other defects. If snap off acoustical insulation or headliners are present, remove several panels and check underneath for skin or structural defects.

7.4.2.7. Inspect structures and components in the lower or aft crawl spaces, whenever practical.

7.4.2.8. Inspect visible engine areas, intake and exhaust areas.

7.4.2.8.1. On gas turbine aircraft, examine the inlet guide vanes or first compressor section for evidence of salt deposits.

7.4.2.8.2. On reciprocating engine aircraft, remove general cowling sections attached with quick access fasteners, and examine visible external engine structure lines and cables.

7.4.2.8.3. On helicopters, inspect areas around main and tail rotor transmissions, as well as the rotor hubs and rotors.

7.4.2.9. Inspect wheels, struts, and wheel well areas as follows:

7.4.2.9.1. Inspect tires for serviceability.

7.4.2.9.2. Inspect struts for corrosion and visible leaks.

7.4.2.9.3. Inspect internal wheel well structure components and mechanisms for deterioration.

7.4.2.9.4. Inspect wheels for corrosion. If it is necessary for inspection to remove one or more wheels, coordination will be made with the scheduler.

7.4.2.9.5. If the inspection reveals that, for any reason, it would be unsafe to tow the aircraft, document this on the AMARC Form 43 in red and spray paint “DO NOT TOW’ in red, on the aircraft near the nose wheel.

7.4.2.10. Inspect other specific areas peculiar to the aircraft mission, design and series (MDS). For example, inspect camera compartments and optical windows on photo reconnaissance aircraft.

7.4.3. Documenting Material Condition Discrepancies:

7.4.3.1. The key to proper documentation of each discrepancy found is to describe its location, character, and severity.

7.4.3.1.1. The location of a defect should be described by specifying a panel number, station number, or part number, followed by a description. For example, “FS275, lower access panel,” or “Panel No. 4825, P/N 82563-5.” When a station, panel, or part number cannot be given, an accurate location description, such as “R/H side of fuselage about 24 inches aft of wing” would be sufficient.

7.4.3.1.2. In describing the character of the defect, just state the general defect type. For example, a windshield may show crazing or delamination and a structural member may show evidence of cracks or corrosion. If the character of the defect is recognized in greater detail, such as stress corrosion cracking, inter-granular corrosion, or galvanic corrosion, the more specific terminology should be used.

7.4.3.1.3. The last and most difficult aspect of documenting a defect is to state its severity. Although descriptions on the severity of any defect tend to be subjective, the best criterion will usually be the affect of the defect on the intended function of the component. For example, a steel bracket may show a considerable degree of surface rust before the defect would be considered severe. Yet, the reliable functioning of an electrical connector, which has been a small quantity of corrosion on the pins and terminals, would be highly questionable and would be considered severe. The number of categories of severity should be kept to a minimum for the sake of simplicity and the following categories should be sufficient in most instances:

7.4.3.1.3.1. Mild - No affect on intended function.

7.4.3.1.3.2. Moderate - Slight affect on intended function.

7.4.3.1.3.3. Significant - Part probably would not perform intended function reliably; repair may be possible.

7.4.3.1.3.4. Severe - Part has been deteriorated beyond repair. (A sample discrepancy would be written: FS001, camera mount bracket, severe inter-granular corrosion.)

7.4.3.2. Discrepancies noted in the E&E sheet will include deficiencies of a maintenance nature, such as inadequate lubrication, dirty surfaces, or poor paint quality.

7.4.4. Directing Corrective Action. E&E personnel will direct the actual correction of material condition defects IAW TO 1-1-686.

7.4.5. Materiel Condition Summary. This section of the E&E report provides managers with an overall picture of the condition of each aircraft and its major subsections as visually determined by a qualified inspector. The major areas listed are predominantly based on the subdivisions of TO 1-1-686. The rating in each area is based on the inspector's judgment regarding the material condition of aircraft subsections, compared to other aircraft of the same MDS and similar aircraft inspected. Line through non-applicable rating sections. The following list is provided to aid the inspector in the summary evaluations:

7.4.5.1. Crew and Cargo Areas - All internal areas of the aircraft that would normally be used by crew, passengers, or for storage of cargo. Emphasize those areas most essential to safe operation of the aircraft (cockpit, controls, etc.)

7.4.5.2. Transparent Plastic/Glass - Canopies, side windows, viewing ports, camera parts, and internal and external transparent covers.

7.4.5.3. Battery Compartments - All structural and skin areas in and directly external to battery compartments, and components in the compartments that directly interface with the battery, such as terminals and electrical cables.

7.4.5.4. Cables - All observed cables or sections of cables associated with control of aircraft and subsystems, including pulleys, bellcranks, and components.

7.4.5.5. Visible Airframe - All observed aircraft structural components in the fuselage, wings, stabilizers, and rudders associated with aircraft structural integrity. In helicopters, this would be the fuselage and tail boom.

7.4.5.6. External Skin - All observations of external aircraft coverings, except control surface

metal or cloth coverings, including condition of paint coatings.

7.4.5.7. External Compartments - All panels, coverings, and auxiliary structures observed in external compartments and immediate external area.

7.4.5.8. Movable Surfaces - All surfaces associated with control of the aircraft, such as elevators, aileron rudders, trim tabs, speed brakes, and dive brakes, including the condition of cloth and metal coverings.

7.4.5.9. Electrical Wires and Connectors - All wires, connectors, and components associated with power of signal transfer in the aircraft, except battery connectors and leads.

7.4.5.10. Radomes and De-icer Boots - The condition of external rubber goods, fiberglass, composites, and other non-metallic coverings (except cloth and transparent plastics).

7.4.5.11. Gear and Wheels - All items and components in the wheel wells during normal aircraft flight, including non-retractable tail wheels and arresting gear.

7.4.5.12. Power Plants and Systems - Observations (also results of crew debriefing and operations run-up) of engines and all components associated with the application of motive power during flight.

7.4.5.12.1. In propeller driven aircraft, include such items as propellers, governors, and pitch controls.

7.4.5.12.2. In helicopters, include such items as main and tail rotor transmissions, blades, pitch controls, and hubs.

7.4.5.13. Hydraulic Pneumatic Systems - The condition and operation of hydraulic and pneumatic lines, fittings, couplings, boost pumps, regulators, valves, and solenoids.

7.4.5.14. Electronics and Accessories - Observations and any operational knowledge regarding flight essential electronic gear and other accessory systems, such as egress, oxygen, heaters, defrosters, and pilot safety restraints.

7.4.5.15. Overall - Summarize the E&E inspector’s overall judgment of the condition and operation of the aircraft, based upon crew debriefings, operational checks, records reviews, and material condition inspections.

7.5. Responsibilities:

7.5.1. LAIA or LAOA will:

7.5.1.1. Decide the need for an aircraft E&E based on the type of project to which the aircraft is assigned or other applicable program needs.

7.5.1.2. Develop an AFMC Form 958/959; work control document workbook, with the E&E requirements based on TO 1-1-686 and AMARC Form 43. The AFMC Form 958/959 for performing an E&E on designated MOB aircraft will include the team concept.

7.5.1.3. Review each AMARC Form 43 after the E&E is done to identify severe condition deficiencies or trends which may need special attention, such as expansion of criteria in certain aircraft functional areas, correction of a deficiency, or consulting with the customer or system manager on major deficiencies.

7.5.2. LAIR, the primary E&E function, will:

7.5.2.1. Review AFMC Form 958/959 workbook and AMARC Form 71 for any special or unusual requirements, and get additional technical guidance from LAIA, as necessary.

7.5.2.2. Conduct an E&E IAW TO 1-1-686, AFMC Form 958/959 workbook instructions, and sound inspection principles and experienced judgment of the inspector.

7.5.2.3. During the E&E, carefully document the specific inspection results as required by the workbook and AMARC Form 43.

7.5.2.4. Direct corrective actions with regard to material condition deficiencies, as specified in TO 1-1-686, IAW proper management procedures.

7.5.2.5. Provide assistance on aircraft records review to validate requests for initial issue of repair cycle assets.

7.5.2.6. Advise Quality Assurance Office (XP-QA) and FSO of flight safety item discrepancies observed on incoming aircraft for submitting unsatisfactory reports.

7.5.2.7. When requested, provide the Workload Division (FMW) with condition codes for excess aircraft.

7.5.2.8. Identify items missing from the aircraft which, during normal conditions, would be aboard the aircraft by part number, TO, figure and index.

7.5.3. For process-in aircraft after the classified and accountable inventory is complete, an E&E inspection is performed. E&E is a comprehensive aircraft inspection, including corrosion prone areas, and damage. A team of major aircraft systems specialists performs the inspection:

7.5.3.1. Visually inspect the aircraft, engines, and installed components, identifying all missing items. Review the aircraft jacket file package for items previously processed as mission essential on AMARC Form 22 to prevent duplicate processing. For components removed or missing, process paperwork as follows:

7.5.3.1.1. Prepare an AMARC Form 22 in two copies, listing all missing components and entering an “H” reason why code in the “Why Code” column.

7.5.3.1.2. Update the asset visibility record IAW paragraph 11.

7.5.3.1.3. Place one copy of the AMARC Form 22 in the aircraft jacket file package. Keep the other copy with the aircraft records.

7.5.3.2. Review the aircraft jacket file package for service or history items that may affect the storage and processing requirements.

7.5.3.3. Perform the corrosion inspection as follows:

7.5.3.3.1. Make a visual inspection of the aircraft, engines, and installed components IAW TO 1-1-686 and AFMC Form 958, and review the aircraft records.

7.5.3.3.2. The owning service will determine if the aircraft should be corrosion arrested IAW E&E inspection findings.

7.5.3.3.3. From the information provided by the aircrew debriefing, determine if the power plant and related systems need checking out (engine run), including full power and afterburners.

7.5.3.3.4. Remove all quick-disconnect attached access panels, doors, and fairings for examination of internal areas. If examination indicates additional hidden damage, remove screws, attached access panels, doors, and fairings, as necessary, to determine the condition of the aircraft.

7.5.3.4. After inspection:

7.5.3.4.1. Enter discrepancies found during the E&E inspection on the AFMC Form 958 and attach a copy of AMARC Form 43. For Navy aircraft, make three copies: one copy to FSO, one copy for the work package and one copy for the E&E file. For Air Force, Coast Guard and Army aircraft, make two copies: one copy for the work package and one copy for the E&E file.

7.5.3.4.2. If the aircraft does not require any corrosion control, enter "N/A" on the AFMC Form 958, sign and date.

7.5.3.4.3. If additional hours are required to correct discrepancies, request over and above hours through LAIA.

7.5.3.4.4. Notify LAIA of task completion.

8. PROCESSING NON-FLYABLE AEROSPACE VEHICLES. Non-Flyable aircraft or missiles are received by truck, rail, or air. Process as follows:

8.1. FMW will:

8.1.1. Prepare and publish the initial WAD.

8.1.2. On arrival and after acceptance of the aircraft, the AVDO will:

8.1.2.1. Prepare and make distribution of the master AMARC Form 71.

8.1.2.2. Ensure the aircraft is loaded into the system.

8.2. LAIA, Planner will prepare the AFMC Form 958 work packages and give to LAIA, Scheduler.

8.3. LGSD will:

8.3.1. Notify LAIA, Scheduler of arrival.

8.3.2. Check the freight bill to ensure the number of pieces, weight, and data agrees with the shipment.

8.3.2.1. If damage or shortage is found, have photographs made, if necessary; and either accept or refuse the shipment.

8.3.2.2. If no defects or discrepancies are found, sign the freight bill and release the shipment to LAIR.

8.4. LAIA, Scheduler will:

8.4.1. Send LASG, LAIR, and Motor Pool Branch (LAEM) personnel to inspect and off-load the aircraft or missile.

8.4.2. Issue the AFMC Form 958 to LAIR to be placed in the aerospace vehicle.

8.4.3. Schedule and monitor production work events as outlined in the AFMC Form 958.

8.5. LASG will:

8.5.1. Inspect the aircraft and remove any pyrotechnic guns, loose ammunitions, or munitions that could be a hazard to personnel during the acceptance inspection and off loading procedures.

8.5.2. Ensure that safety pins are installed in the egress system or it has been deactivated.

8.5.3. Paint a green cross on the front, left side of the aircraft to show all explosives are removed.

8.5.4. Annotate the AFMC Form 958 and complete the AMARC Form 71; place a copy of the AMARC Form 71 with the work package and keep the others.

8.5.5. Notify LAIA of completion.

8.6. LAIR Receiving will:

8.6.1. Ensure LASG has removed explosive components from the aircraft before inspecting aircraft.

8.6.2. Along with LGSD, inspect all aircraft or missiles for visible shipment damage or obvious shortages before off-loading.

8.6.3. Remove the aircraft or missile records. Prepare forms and process aircraft or missile as shown in paragraph 5. Include on the AMARC Form 125, shipment information, MDS, serial number, releasing activity, and date of arrival. Send aircraft or missile records to XPIIM. If the aircraft inventory reveals any shortages not shown on the freight bill, LAIR will send a letter to the shipping organization listing the shortages.

8.6.4. Perform a classified and accountable items inventory. These items will be removed, identified, and processed IAW paragraph 11, condition inspected, and tagged IAW AMARCI 31-401.

8.6.5. When inventory is completed, paint the number “7” with yellow paint on the front, left side of the aircraft.

8.6.6. Stencil the AMARC ID number IAW AMARC Engineering Drawing #X7926100 and instructions in the AFMC Form 958.

8.6.7. Annotate the AFMC Form 958 and complete the AMARC Form 71; place a copy of the AMARC Form 71 with the work package and keep the other.

8.6.8. Notify LAIA of completion.

8.7. LAIP will:

8.7.1. Perform explosive meter (sniff test) readings on all fuel cells and tanks on incoming non-flyable aerospace vehicles as directed by LAIA.

8.7.2. Sign the AFMC Form 958 and complete the AMARC Form 71.

8.7.3. Notify LAIA of completion.

8.8. LAEM will:

8.8.1. Off load the aerospace vehicle in the designated area. Comply with AFMC Form 958 requirements for parking and securing.

8.8.2. Complete the AMARC Form 71, place a copy with the work package, and keep the other.

8.8.3. Notify LAIA of completion.

8.8.4. Notify LAET of the location of the aerospace vehicle (including area, row, and position in row). LAET will include the information in the AF Form 3136 for AVDO.

9. CEM EQUIPMENT AND PHOTO VAN EQUIPMENT PROCESS IN. AMARC will receive only CEM and photo van equipment that can be stored outside. Each CEM and photo van equipment item selected for storage will keep its Standard Systems Designator (SSD) throughout its storage life, even if only major subsystems are put in storage. Accountability will be with the Sacramento Air Logistics Center (SM-ALC), IAW AMARCI 21-100, *Processing of AMARC Accountable Assets*, chapter 10; and AFMCR 65-31, *Reclamation of USAF Property*, chapter 6. Upon receipt of CEM or photo van equipment at AMARC, LGSD and LAIR personnel will conduct a joint condition/acceptance inspection.

9.1. If carrier caused damage or discrepancies are found, LGSD will:

9.1.1. Call the 355th Transportation Branch to document and photograph the damage before the truck is unloaded.

9.1.2. When packaging discrepancies are found, request a LGL packaging specialist inspect the discrepancy and fill out SF 364, **Report of Discrepancy**.

9.1.3. Ensure documentation and materiel condition discrepancies are also recorded on the SF 364.

9.1.4. Ensure one copy of SF Form 364 is sent to the Sacramento Air Logistics Center, Materiel Utilization Control Section or to the item manager of photo van at Ogden OO-ALC, Hill AFB, UT.

9.2. When the joint acceptance inspection is completed, LGSD will:

9.2.1. Ask LAIA to dispatch personnel and equipment to offload CEM or photo van equipment at the designated storage site. (The carrier will not be delayed pending preparation of the SF 364.)

9.2.2. Prepare an AF Form 1991 IAW AMARCI 21-131. Call the FMW AVDO to report the type of equipment received, the serial number (if available), and the date of arrival. Information will be called in no later than one hour before the end of the duty day.

9.2.3. Deliver a copy of the receiving document to AVDO for action IAW AMARCI 21-131 and AMARCI 21-118, *Work Authorization Document*.

9.3. As scheduled, LAIR will:

9.3.1. Mark (metal tag or stencil) CEM and photo van equipment with AMARC ID number and type code.

9.3.2. Remove the AFTO Form 471, **Electronic Set Inventory Checklist Configuration Data**, from the equipment. List shortages found with a reason why code "H" on the AMARC Form 22 and update the asset visibility record IAW paragraph 11.

9.3.3. As scheduled, comply with the work requirements on the AFMC Form 958 and when completed place the AFMC Form 958 inside the CEM or photo van equipment.

9.3.4. Place the AFTO Forms 471, *REV documents and AMARC Forms 22 in the record folder and send them to XPIIM for file.

9.4. When scheduled, LAIS will seal the equipment IAW sealing diagram provided by LAIA, Materials Laboratory.

10. FOLLOW-ON SHIPMENT RECEIPTS. Property received from the losing organization before or after the aircraft arrives will be processed through LGSD. Property in this category is not picked up on supply records.

10.1. LGSD will deliver the property to LAIR.

10.2. When the equipment is received in LAIR, Receiving area, the materials examiner will:

10.2.1. Protect the property with plastic sheeting or tarps, as necessary. Store the equipment by location, aircraft type, and tail number. A large board is located in the staging area, which shows where the property for each aircraft tail number is located. It will remain there until such time that personnel conduct an aircraft inventory and the equipment will be returned to the appropriate aircraft.

10.2.2. If property arrives before the aircraft, set up a suspense file, using the receipt document or DD Form 1149, Requisition and Invoice/Shipping Document, pending arrival of the aircraft. If the aircraft is delayed 30 days or more after receipt of property, start follow-up action by letter and request disposition of the property or status of the aircraft delivery.

10.2.3. If the customer is delayed in sending the equipment, and the aircraft has already been sealed, the seal will be broken and the equipment will be placed in the aircraft. A work order will be submitted to reseal the aircraft at the customer's expense.

10.2.4. When an item is to be stored on the aircraft fill out an AMARC Form 22 and insert an "X" (payback indicator) in the Why Code column. Input an *RE. This action will reduce the quantity removed and the reason why code 'H' on the asset visibility record. Place the AMARC Form 22 and the attached *RE in the aircraft jacket file.

10.2.5. Any equipment that is too large to fit on the aircraft, such as ladders, will be turned in to the supply system. When an item is processed to the storage account, prepare an AMARC Form 22 in two copies and insert a "Y" (payback indicator) in the Why Code column to indicate processed to storage. Send the AMARC Form 22 and the tagged property to LGLM. The tags will be marked "Follow-on Shipment" and show the losing organization's document number.

10.3. LGLM and LAIR will follow procedures in paragraph 11.

11. COMPONENT STATUS LISTING (D003AC031) AND ASSET VISIBILITY UPDATE. This process is used to identify items removed or missing from the aircraft after arrival at AMARC and to ensure all shortages are entered into the computer. When the *RE is input into the computer system, the asset visibility for the applicable aircraft is updated. The C03, Part 1, will list all asset visibility posted for the specific aircraft requested. This includes property removed and placed in storage or property coded as not available. (See AMARCI 21-100).

11.1. LAIR and LASG will:

11.1.1. Annotate removed and missing components on an AMARC Form 22 with applicable reason why code to update the asset visibility record.

11.1.2. Use the appropriate "Payback Indicator" code ("X" for items returned to aircraft or "Y" for items processed into storage) IAW paragraph 10. These two indicators are processed only if C03 indicates asset visibility data have previously been posted.

11.2. LGLM will:

11.2.1. Sign and date the AMARCR Form 22; keep the original and sent the copy to the requester. When using the *RE, use copy 1 as a transfer document; return copy 2 to the requester, and keep the remaining copies.

11.2.2. If the AMARC Form 22 is for asset visibility processing and NSNs are not annotated, forward to LARS, Research for processing. Annotate date sent to LARS in the log.

11.2.3. If property is available, review the Stock Number to Part Number Cross-Reference Directory (D003AB09) to enter a valid NSN for the part number on the AMARC Form 22; if the NSN is not loaded, coordinate with LARS, Research.

11.2.4. Check the part number and quantity shown on the AMARC Form 22 or *RE against the items turned in. Make sure the property is properly tagged IAW AMARCI 23-202.

11.2.5. Process the *RE to update the asset visibility IAW AMARCI 21-100. If the NSN rejects, make sure the reject is corrected within 3 days. If the NSN is not loaded, coordinate with LARS, Research.

11.2.6. Within 20 days (30 days for munitions item turn in), log in date returned to LAIR or LASG and send copy 1 of the AMARC Form 22 to originator along with a copy of the *RE (copy 1 for asset visibility or copy 2 if property was processed).

11.3. LARS, Research will:

11.3.1. Research the part number and load the NSN and part number (XPN) (see AMARCI 21-100).

11.3.2. If the part number does not convert to a good NSN, call originator for clarification.

11.3.3. If the part number is valid and no NSN is available, assign a local stock number and prepare a DD Form 1348-6, **DOD Single Line Item Requisition System Document**.

11.3.4. Return the completed AMARC Form 22 to originator within 15 calendar days.

11.4. When LAIR or LASG receives the AMARC Form 22, they will:

11.4.1. Verify accuracy of the processing and clear the AMARC Form 22 from the 20-day suspense file.

11.4.2. Place all documents in the aircraft jacket file package (held in LAIR) until all storage processing documentation has been cleared.

11.4.3. Forward the completed package to XPIIM for file.

11.4.4. Follow-up with LGLM if the original AMARC Form 22 has not been returned within 20 days (30 days for munitions turn in). LASG will forward a copy of the AMARC Form 22 to XPIIM for file.

12. CREW MEMBER ITEMS TO BE SHIPPED: **Process as follows:**

12.1. LGSS will:

12.1.1. Prepare the shipping document with the following information:

12.1.1.1. List of items to be shipped, including NSN (if available), part numbers, other identifying and descriptive information available, and quantity of each.

12.1.1.2. Aircraft type and tail number to establish a record of item removed from a specific aircraft.

12.1.1.3. Destination of shipment (organization, mailing address, and supply account number, if known).

12.1.1.4. Shipment priority requested.

12.1.1.5. Name, grade, and title of pilot. Attach a copy of pilot's orders, if available, to further justify shipment.

12.1.2. Give the pilot the completed shipping document.

12.2. LAIA taxi driver will take the pilot to Packaging/Preservation Branch (LGLP) to have the items shipped according to the shipping document.

12.3. LGLP will ensure the shipment of removed items if the pilot cannot carry the required shipping document. **NOTE**: For Navy aircraft, items other than personal gear will not be issued to pilots or aircrew without prior notice from the FSO.

OFFICIAL

LAIRD VAN GORDER
Chief, Computer Support Branch

Attachment 1

TERMS, ACRONYMS, ABBREVIATIONS

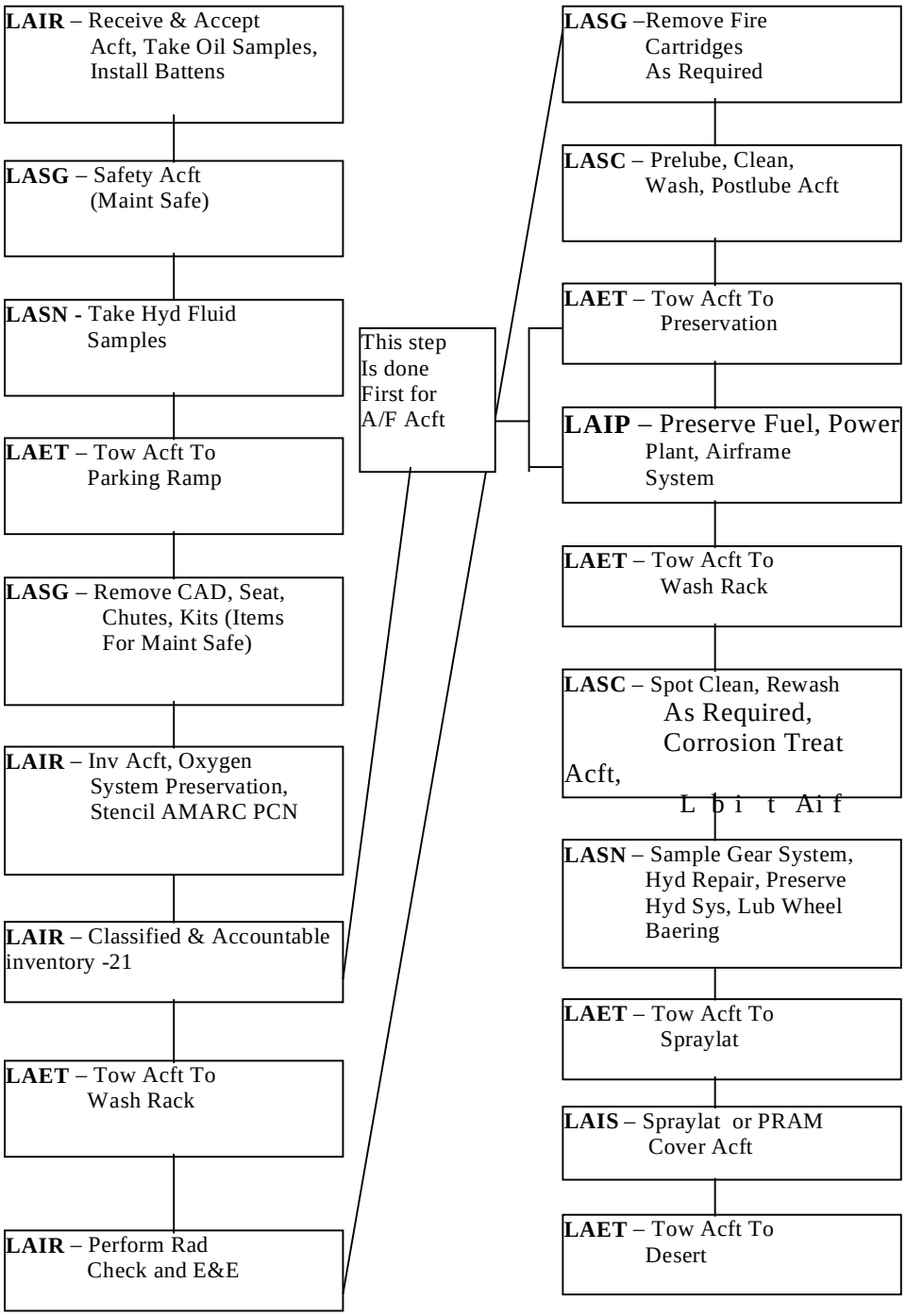
Acft	Aircraft
A/C	Aircraft
ATA	Actual Time Arrival
ATD	Actual Time Delivery
AVDO	Aerospace Vehicle and Distribution Officer
Bldg	Building
BUNO	Bureau Number
CAD/ PAD	Cartridge-Actuated Device/Propellant-Actuated Device
CAS-B	Combat Ammunitions System Base
CEM	Communications, Electronics, and Meteorological
CSD	Constant Speed Drive
DSN	Defense Systems Network
DoDIC	Department Of Defense Identification Code
DRMO	Defense Reutilizaton and Marketing Office
E&E	Examination and Evaluation
FIG	Figure
FL	Form Letter
FSC	Federal Supply Classification
HRS	Hours
IAW	In Accordance With
IBIS	In-flight Blade Inspection System
ID	Identification
IND	Index
LDG	Landings
LEL	Lower Explosive Limits
MDS	Mission, Design, Series
NAVICP	Naval Inventory Control Point
NSN	National Stock Number
PCN	Production Control Number
PROP	Propeller
QTY	Quantity
RCC	Resource Control Center
SBSS	Standard Base Supply System

SDLM	Scheduled Depot Level Maintenance
SSD	Standard System Designator
S/N	Serial Number
TAN	Total Acid Number
TOT	Total Operating Time
TO	Technical Orders
TSO	Time Since Overhaul
VIP	Very Important Person
VOL	Volume
WAD	Work Authorization Document

Attachment 2
1000 PRESERVATION FLOW CHART

1000 PRESERVATION FLOW CHART

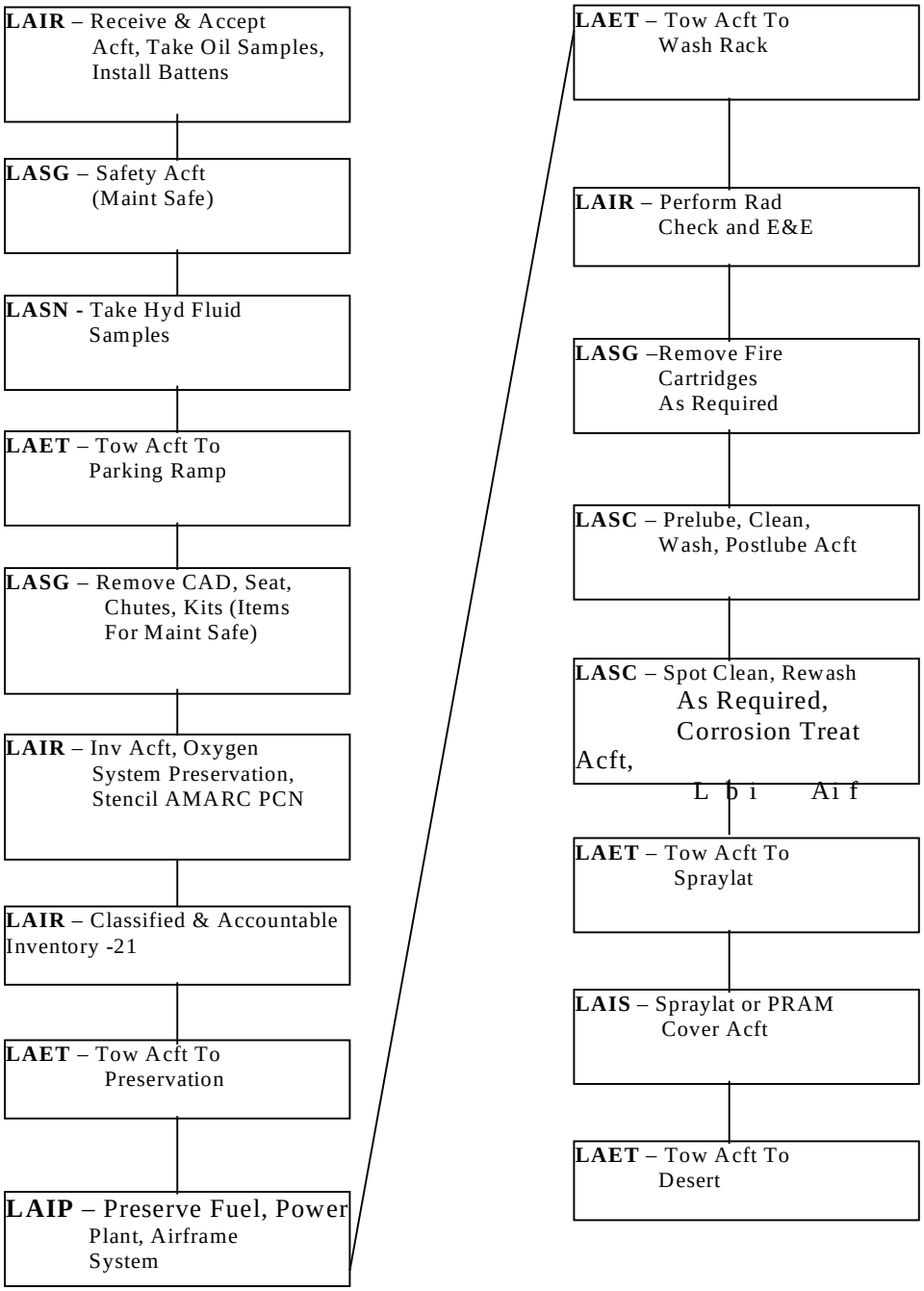
(Long Term Storage High Probability of Withdrawal)



Attachment 3
2000 PRESERVATION FLOW CHART

2000 PRESERVATION FLOW CHART

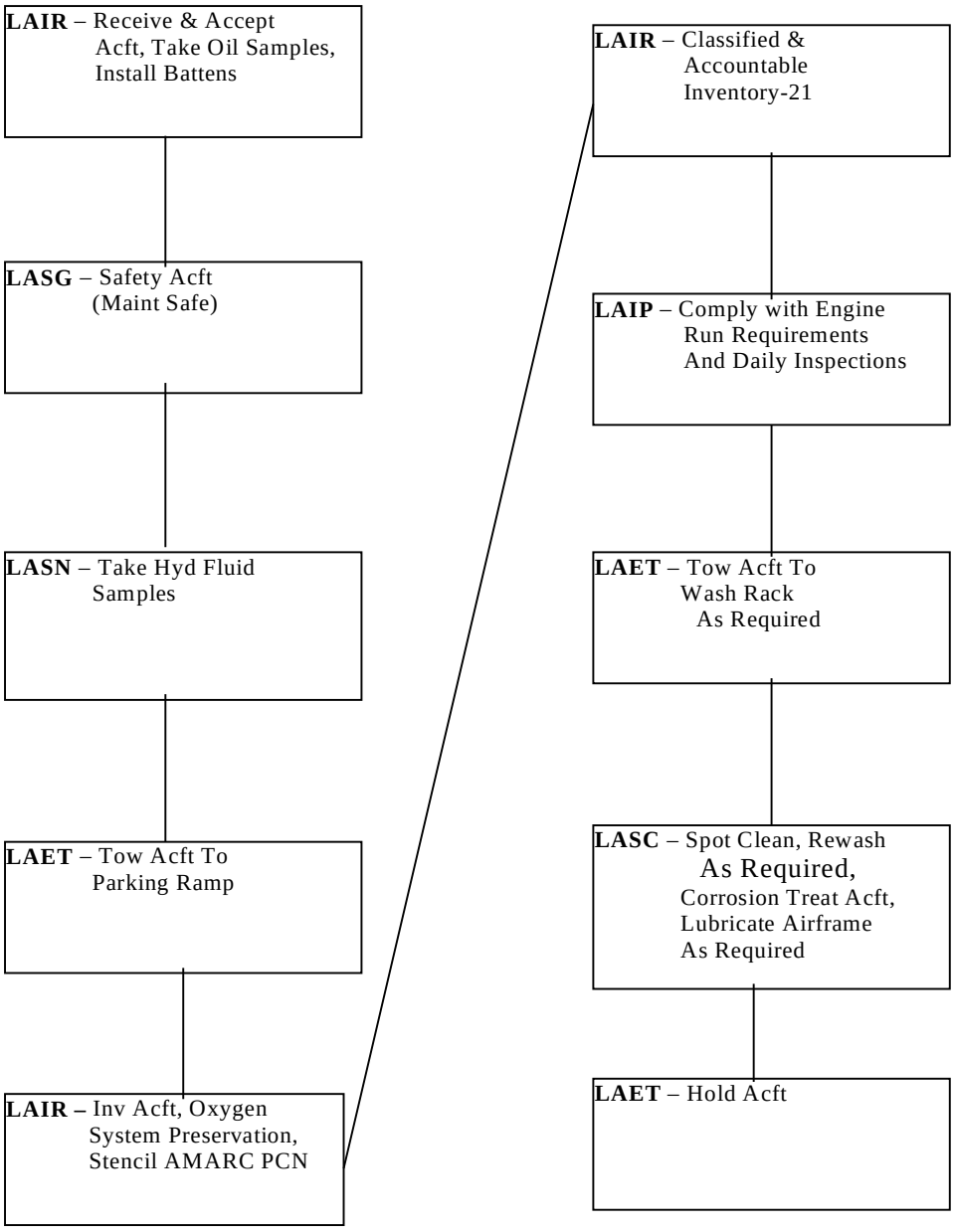
(Long Term Storage Eventual Reclamation)



Attachment 4
3000 PRESERVATION FLOW CHART

3000 PRESERVATION FLOW CHART

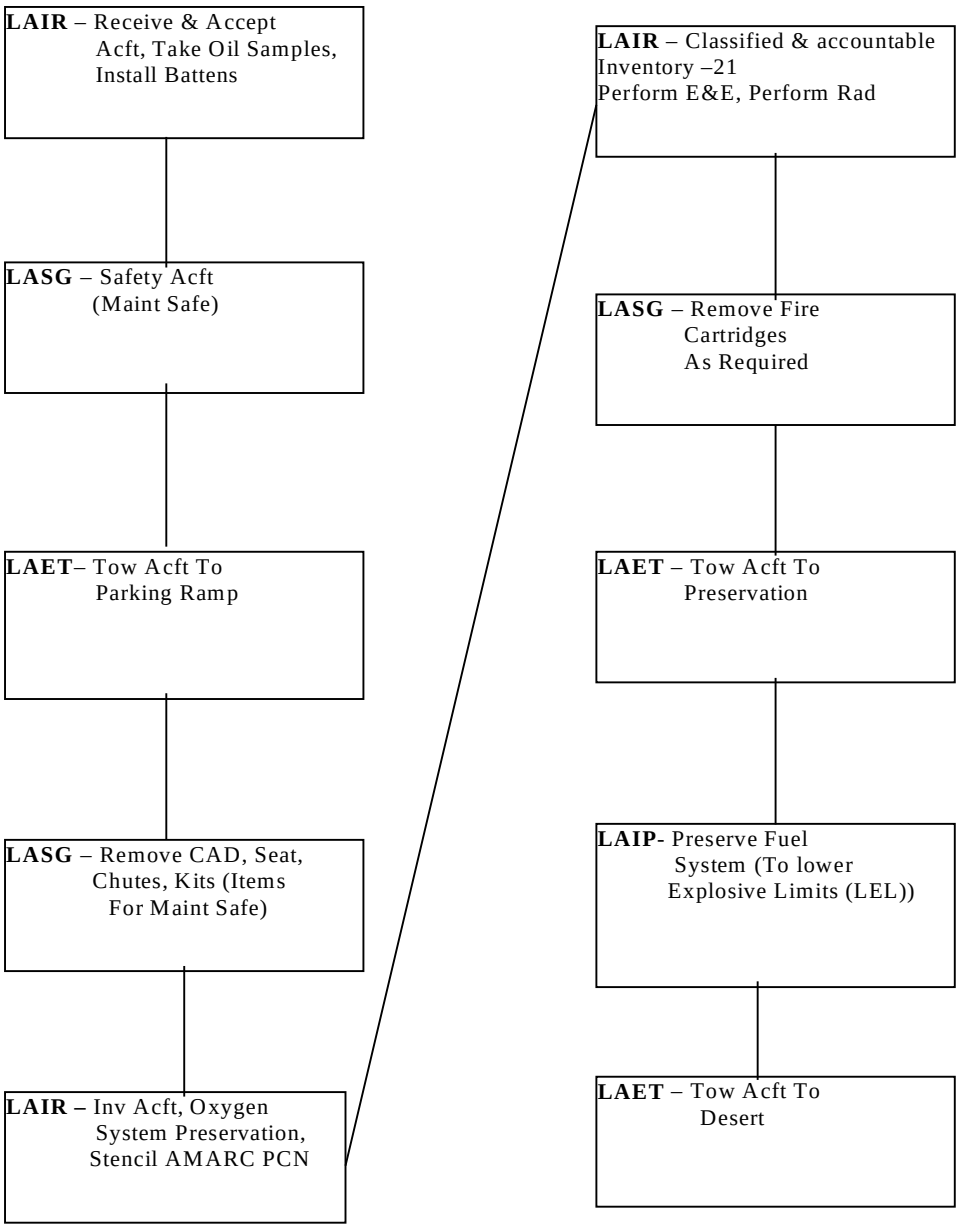
(Flyable Hold Short Term Storage [45 days])



Attachment 5
4000 PRESERVATION FLOW CHART

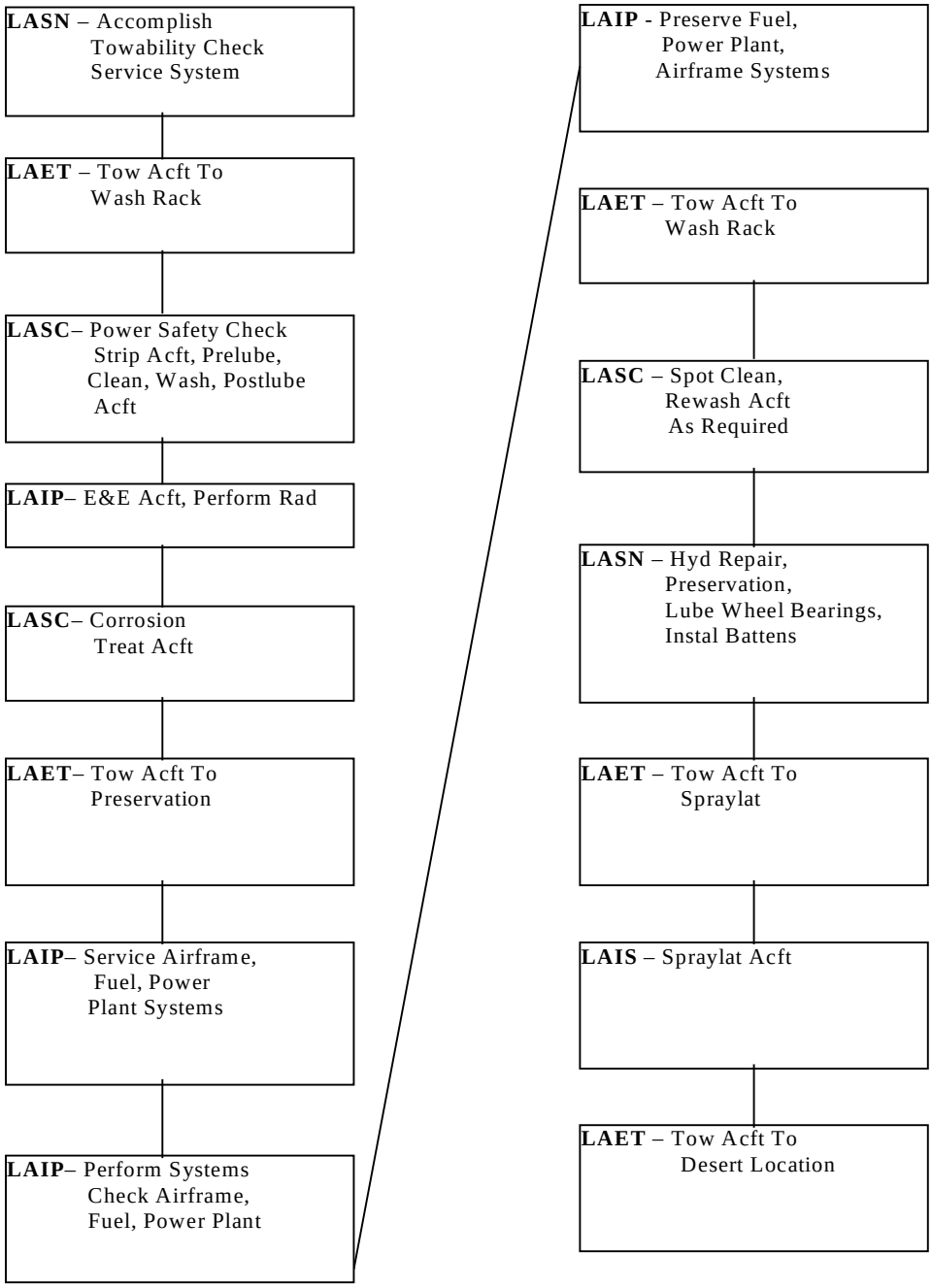
4000 PRESERVATION FLOW CHART

(Immediate Reclamation)



Attachment 6
4000 PRESERVATION FLOW CHART

DEPRESERVATION/REPRESERVATION FLOW CHART



Attachment 7
HAND RECEIPT

Hand Receipt

ACFT ID . . . . . .

PART NR . . . . . .

SER NO . . . . . .

HAND RECEIPT FOR CLASSIFIED/SENSITIVE ITEM HANDLING.
I HERE BY ACKNOWLEDGE RECEIPT FOR MATERIEL IDENTIFIED ON THE FACE OF THIS FORM/ATTACHED LISTING.

SIGNATURE . . . . . .

ORGANIZATION . . . . . .

The information on this form is printed by the AMARC system when an item is coded as classified or sensitive. The following information must also appear on this document or an attached listing: Quantity, Shipped From, Shipped To, and the Nomenclature.

One copy is left with equipment when turned over to LGSS and one copy is put in inventory (at LAIR) with suspense on input to D003AC03, AMARC System Asset Visibility.

When several items are removed from one aircraft, LAIR will use an AMARC Form 22, which has been stamped in red CLASSIFIED/SENSITIVE.

Attachment 8
AMARC FORM 40, ENGINE/CSD OIL ANALYSIS

AMARC Form 40

(Engine/CSD Oil Analysis)

ENGINE/CSD OIL ANALYSIS

A/C Type _____

A/C S/N _____

Arrival Date _____

Arrival Time _____

Engine ☐ **CSD** ☐

1	2	3	4	5	6	7	8
☐	☐	☐	☐	☐	☐	☐	☐

Drain ☐ **Tube** ☐

Hot ☐ **Cold** ☐

Process-In ☐

Flyaway ☐

Represervation ☐

This form was designed in Sep 94. The requirement is also documented in AMARCI 21-120.

After the form is completed, it is sent to LAIA/LAB and then input into computer. The computer run is forwarded to XPIIM to be placed in the engine records. (If sample fails test, copy is also sent to LAIR to be attached to the AFMC Form 958.

Attachment 9
AMARC FORM 22, COMPONENTS/ITEMS MISSING AND/OR REMOVED FROM AIRCRAFT

COMPONENTS/ITEMS MISSING AND/OR REMOVED FROM AIRCRAFT				AIRCRAFT MDS		AIRCRAFT SERIAL NUMBER	AMARC ID NUMBERR
				T.O. NUMBER			
WHY CODE	QTY	NOMENCLATURE	VOL	FIG	IND	PART NUMBER (From T. O.)	STOCK NUMBER
CHECKED BY *(Signature and Office Symbol)*				DATE		RECEIVED BY (Signature and Office Symbol)	DATE

Attachment 10
AMARC FORM 16, PRELIMINARY AIRCRAFT PILFERABLE ITEM CHECK

PRELIMINARY AIRCRAFT PILFERABLE ITEM CHECK

AIRACFT MDS	AIRCRAFT S/N	AMARC ID #

In ink, check off items that are installed. Use "NA" for items that do not apply.

AC FT DATA PLATE ALTIMETER (S)) (Pilot CoPilot Other (state))

CLOCK (S) (Pilot CoPilot Other (state)) GROUND EQUIPMENT

IRE EXTINGUISHERS CRASH AXES HEADSETS (Telex type) HOT CUPS

AIRCRAFT GUNS RO PISTOL

OTHER (State):

Nur of personnel parachutes removed at pilot's request. _____

CREWMEMBER SIGNATURE	GRADE	ORGANIZATION

AIRCRAFT CHECKED BY		OFFICE SYMBOL DATE

This form was designed in Feb 89.

It is used to help LAIR ensure specific items have been removed or checked. LAIR will:

1. Check the "other" block to indicate how many parachutes or travel pods were removed for shipment at the crewmember's request.

2. Sign the form along with the crewmember, to confirm agreement with all annotations made on the form.

After the form is completed, it is placed in the aircraft jacket file package in LAIR awaiting 780 inventory. After the inventory is completed the package is forwarded to XPIIM.

Attachment 11
AMARC FORM 49, ARMY/NAVY AEROSPACE VEHCILE DELIVERY RECEIPT

ARMY/NAVY AEROSPACE VEHICLE DELIVERY RECEIPT NUMBER	ACFT MODEL	SERIAL NUMBER	PROJECT
CLASSIFIED MATERIAL INSTALLED IN AIRCRAFT			
RECEIVING ORGANIZATION	DELIVERY POINT		
RELEASING ORGANIZATION	PICKUP POINT		

RECORDS CHECKLIST

ARMY:	PRESENT	MISSING	N/A	INITIALS (if missing)
DA 2408-17 (780 INVENTORY) BLUE CARDS				
DA 2408-13 (FLIGHT LOG)				
DA 2408-15 AIRCRAFT CARD				
DA 2408-16 ENGINE CARD				
DA 2408-16 PROP/ROTOR CARD				
AN 18-40 WEIGHT AND BALANCE BOOK				
LOAD ADJUSTER				
NAVY:				
OPNAV 4790/111 (AIRCRAFT INVENTORY RECORD)				
YELLOW SHEET (FLIGHT DISCREPANCIES)				
AIRCRAFT LOG BOOK				
ENGINE LOG BOOK				
PROP/ROTOR LOG BOOK				
WEIGHT AND BALANCE BOOK				
LOAD ADJUSTER				
KEY				

DATE	ATA	HOURS	LANDINGS
CHUTES	LOCAL TIME OF CUSTODY	NAME & GRADE OF PILOT	

I ACKNOWLEDGE RECEIPT OF AIRCRAFT WITH RECORDS CHECKED ABOVE.

PRINTED NAME SIGNATURE DATE

REMARKS

This form was designed in Dec 85. It is used to record the aircraft records received when an aircraft arrives.

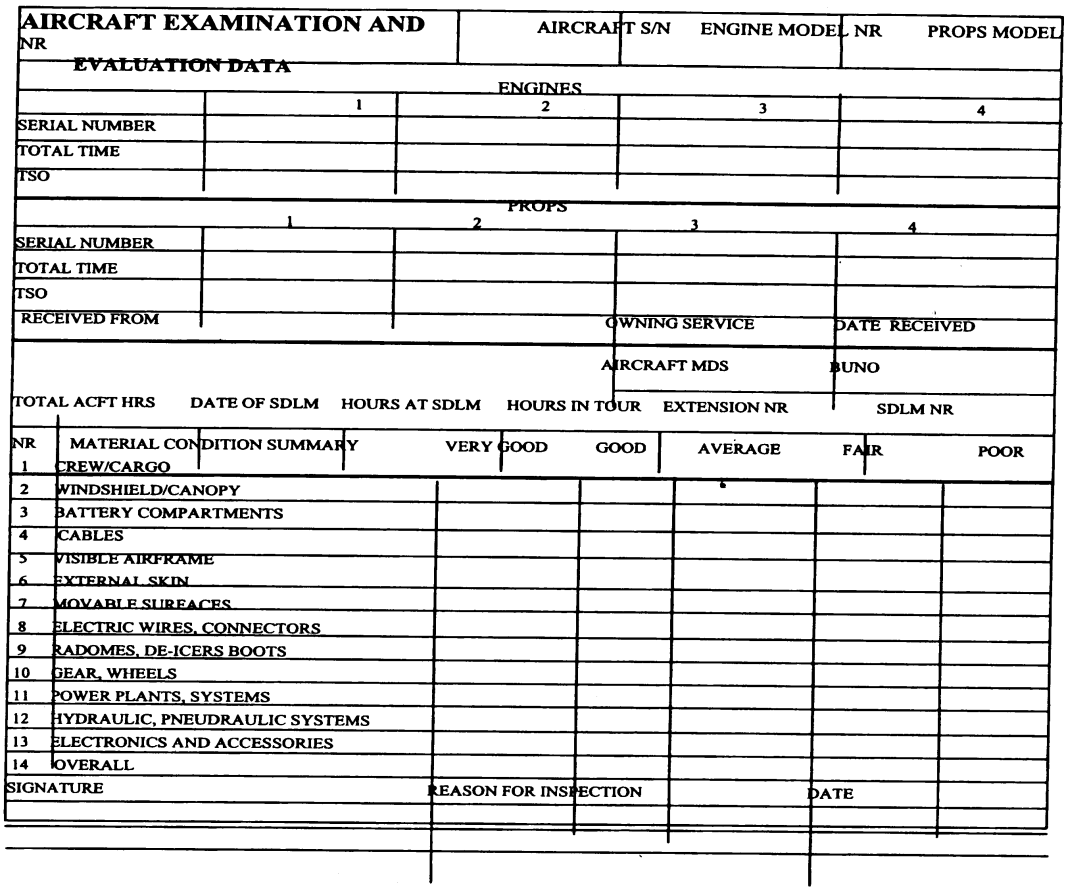
After the form is completed, it is then placed in the aircraft jacket folder and sent to XPIIM.

Attachment 12
AMARC FORM 125, AIRCRAFT DAILY JOURNAL

AIRCRAFT DAILY JOURNAL		DATE			Page of Page		
AIRCRAFT DESIGNATION AND SERVICE	SERIAL NUMBER BUNO	RELEASING ORGANIZATION/COMMAND			ATD	FLIGHT		ACCEPTANCE DATE
						HRS	LDG	

This form was designed in Jun 97. It is used to keep track of the number of aircraft that arrive each day. After the form is completed, a copy is kept in LAIR and a copy is given to XPIIM.

Attachment 13
AMARC FORM 43, AIRCRAFT EXAMINATION AND EVALUATION DATA



AIRCRAFT EXAMINATION AND EVALUATION DATA NR	AIRCRAFT S/N	ENGINE MODEL NR	PROPS MODEL

ENGINES	1	2	3	4
SERIAL NUMBER				
TOTAL TIME				
TSO				

PROPS	1	2	3	4
SERIAL NUMBER				
TOTAL TIME				
TSO				

RECEIVED FROM	OWNING SERVICE	DATE RECEIVED
	AIRCRAFT MDS	BUNO

TOTAL ACFT HRS	DATE OF SDLM	HOURS AT SDLM	HOURS IN TOUR	EXTENSION NR	SDLM NR

NR	MATERIAL CONDITION SUMMARY	VERY GOOD	GOOD	AVERAGE	FAIR	POOR
1	CREW/CARGO					
2	WINDSHIELD/CANOPY					
3	BATTERY COMPARTMENTS					
4	CABLES					
5	VISIBLE AIRFRAME					
6	EXTERNAL SKIN					
7	MOVABLE SURFACES					
8	ELECTRIC WIRES, CONNECTORS					
9	RADOMES, DE-ICERS BOOTS					
10	GEAR, WHEELS					
11	POWER PLANTS, SYSTEMS					
12	HYDRAULIC, PNEUDRAULIC SYSTEMS					
13	ELECTRONICS AND ACCESSORIES					
14	OVERALL					

SIGNATURE	REASON FOR INSPECTION	DATE

This form was designed in May 88. It is used to perform an E&E. The reason for inspection would be "Input to Storage", "Withdrawal Flyaway", "Overland", etc.

After the form is completed, a copy is placed with the AFMC Form 958 with the E&E report and one copy is filed with records kept in LAIR.

Attachment 14
AMARC FORM 13, AIRCRAFT INVENTOR CONTROL CARD

WORK ORDER	ITEMS REMOVED		ACFT TYPE	ACFT SERIAL NO.
WAD			RECEIVED FROM:	DATE
PROJECT				
COMPONENT				
-21				
A/C INV			SHORTAGE LTR	TELEPHONE
RECORD SECTION				
FLYAWAY				

This form was designed in Oct 85. The form shows the items that are removed at AMARC. If the aircraft is configured differently, it is annotated on the backside.

After the form is completed, it is placed in the aircraft jacket folder and forwarded to XPIIM.

Attachment 15

SHORTAGE LETTER SAMPLE

MEMORANDUM FOR DATE

FROM: AMARC/LAIR

SUBJECT: -21 Equipment Shortages

1. The following shortages are found to exist upon completion of inventory of subject aircraft which arrived on

PCN#

ITEM NO	NOMENCLATURE	Quantity

2. In accordance with , request listed items be sent to AMARC/LAIR, 5125 S Safford Ave/Bldg 7506, Davis-Monthan AFB, AZ 85707-4368 Attn: . If authorized to retain items, please FAX your authorization to DSN 228-8405.

3. When shipping these shortages please include a copy of this shortage letter for identification purposes when property arrives at AMARC.

4. If response is not met within 30 days, we will request assistance from your next level of command. You assistance in this matter is greatly appreciated. For additional information call DSN: 228-8610 or Commercial (520) 228-8610.

EQUIPMENT EXAMINER

(This form letter is used to address any aircraft shortages. Paragraph 2 will address a different instruction depending on the service.) Original copy is mailed to losing organization, one copy is filed with aircraft inventory and one copy is placed in LAIR suspense for follow-up.